

CLAIMS

What is claimed is:

1 1. An apparatus for removing an edge bead of a coating of material that has
2 been spun onto the surface of a semiconductor wafer, the apparatus comprising:
3 a. means for dispensing a solvent selectively onto the edge of the wafer;
4 and
5 b. means surrounding the dispensing means for vacuuming excess
6 solvent and dissolved coating material from the edge of the wafer.

1 2. An apparatus according to Claim 1, wherein the dispensing means is a
2 nozzle and the vacuuming means comprises a vacuum port surrounding the nozzle.

1 3. An apparatus according to Claim 1, further comprising:
2 a. means for spinning the semiconductor wafer; and
3 b. means for applying a coating material to the spinning wafer.

1 4. A method for removing an edge bead of a coating of material that has been
2 spun onto the surface of a semiconductor wafer, the method comprising the steps
3 of:
4 a. dispensing a solvent selectively onto the edge of the wafer to dissolve
5 the coating material at the extreme edge of the wafer; and
6 b. applying a suction to vacuum excess solvent and dissolved coating
7 material from the edge of the wafer.

1 5. A method according to Claim 4, wherein the suction is applied to an area
2 immediately surrounding a location at which the solvent is dispensed onto the
3 wafer.

1 6. A method according to Claim 4, wherein the step of vacuuming is performed
2 substantially simultaneously with the step of dispensing.

1 7. A method for spin coating a semiconductor wafer with a soluble material,
2 comprising the steps of:

3 a. spinning the semiconductor wafer;
4 b. applying a coating material to the spinning wafer;
5 c. dispensing a solvent selectively onto the edge of the wafer to dissolve
6 the coating material at the extreme edge of the wafer; and
7 d. applying a suction to the edge of the wafer to vacuum excess solvent
8 and dissolved coating material from the edge of the wafer.

1 8. A method according to Claim 7, wherein the suction is applied to an area
2 immediately surrounding a location at which the solvent is dispensed onto the
3 wafer.

1 9. A method according to Claim 7, wherein the step of dispensing the solvent
2 is performed substantially simultaneously with the step of applying a suction.

1 10. A method for dispensing a chemical onto a semiconductor wafer, comprising
2 the steps of:
3 a. dispensing the chemical selectively onto the wafer; and
4 b. applying a suction to an area immediately surrounding a location at
5 which the chemical is dispensed onto the wafer.

1 11. A method according to Claim 10, wherein the suction is applied substantially
2 simultaneously with the dispensing of the chemical.